

ICS XXXX
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GB

National Standard of the People's Republic of China

GB10138-200X

Substitution for GB 10138-10143-1988

Hygienic standard for salted fish
(Draft for Approval)

Issued on XXXX-XX-XX

Executed on XXXX-XX-XX

**Issued by the Ministry of Public Health of the People's Republic of China and the
Standardization Administration of China**

Introduction

On the date of execution, this standard substitutes the six standards of GB 10138-1988 "Hygienic Standard for Salted Butterfish", GB 10139-1988 "Hygienic Standard for Salted Eel", GB 10140-1988 "Hygienic Standard for Salted Belt Fish", GB 10141-1988 "Hygienic Standard for Salted Chinese Herring", GB 10142-1988 "Hygienic Standard for Salted Spanish Mackerel", and GB10143-1988 "Hygienic Standard for Salted Yellow Croaker". The above-mentioned six standards shall become annulled at the same time.

In comparison with GB10138~10143-1988, this standard mainly contains the following modifications:

Standard text format modified according to GB/T1.1-2000;

Combining 6 previous standards into this standard.

The structure of previous standard is modified, with additions in the requirements for food additive and production process, and other requirements for package, marking, storage and transport.

The application of the standard extended to: "Salt saturated products processed with fresh or frozen fish."

The methyl mercury index in CAC/GL7-1991 "Fish Methyl Mercury Guidance Value" is adopted and methyl mercury limits of $\leq 1.0\text{mg/kg}$ for predatory fish and $\leq 0.5\text{mg/kg}$ for non-predatory fish are added;

Limit value of histamine, lead, arsenic, methyl mercury, cadmium, polychlorinated biphenyl and dimethyl nitrosamine are added, modified units for peroxide value and acid number, and indexes for acid number and peroxide value of "other fish" are also added.

The standards from GB 10138 to 10143-1999 will be replaced by this regulation.

The standard is put forward and governed by the Ministry of Public Health of the People's Republic of China.

The Ministry of Public Health of the People's Republic of China approves the standard.

The standard is worked out by: Shandong Province Sanitation and Antiepidemic Station, Shenyang Heping District Sanitation and Antiepidemic Station, Guangxi Zhuang Nationality Autonomous Region Sanitation and Antiepidemic Station, Hainan Province Sanitation and Antiepidemic Station, Zhejiang Province Shengsi County Sanitation and Antiepidemic Station.

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The previous standards being substituted by this standard are:

The former standards of GB 10138-10143-1988 first issued on January 11, 1989. This is the first revision.

Hygienic Standard for Salted Fish

1 Scope

The standard stipulates the requirements of salted fish, food additives, hygienic requirements for production process, package, marking, storage and transport and method of inspection.

The standard applies to salt saturated products processed with fresh or frozen fish.

2 Normative reference documents

The clauses in the following documents are referenced in this standard and become the clauses of this standard. Any modification lists (except text corrections) or revisions of the reference documents with specific date should not apply to this standard. But, all parties of agreement based on this standard are encouraged to discuss if the newer versions of those documents are applicable. All reference documents without date that are the latest editions are applicable to this standard.

- GB 2721 Hygienic Standard for Table Salt
- GB 2733 Hygienic Standard for Fresh and Frozen Animal Aquatic Products
- GB 2760 Hygienic Standard for Food Additive Use
- GB/T 5009.11 Measurement of Total Arsenic and Inorganic Arsenic in Food
- GB/T 5009.12 Measurement of Lead in Food
- GB/T 5009.15 Measurement of Cadmium in Food
- GB/T 5009.17 Measurement of Total Mercury and Organic Mercury in Food
- GB/T 5009.26 Measurement of N-nitrosamines in Food
- GB/T 5009.37 Analytical Method for Hygienic Standard of Edible Vegetable Oil
- GB/T 5009.56 Analytical Method for Hygienic Standard of Cake
- GB/T 5009.190 Measurement of Polychlorinated Biphenyl in Seafood
- GB 14881 General Hygiene Specifications for Food Enterprises

3 Index requirements

3.1 Requirements of raw materials and auxiliary materials

3.1.1 Salt should conform to the regulations in GB2721.

3.1.2 Raw fish should conform to the regulations in GB2733.

3.2 Sensory indexes

Sensory indexes should conform to the stipulations in Table 1.

Table 1 Sensory Index

Indexes	Requirements
Color	In the color of the fish after salting
Taste and odor	Having the natural taste and odor for the variety, without offensive taste or rancid odor
Texture	Solid, resilient, without mold

3.3 Physical and chemical indexes

Physical and chemical indexes should conform to the stipulations in Table 2.

Table 2 Physical and chemical indexes

Indexes	Standards
Acid value, mgKOH/g fat	
High fat fish (White Herring, Spanish Mackerel, Mandarin Fish)	≤ 60
Low fat fish	≤ 30

Peroxide value, g/100g fat High fat fish (White Herring, Spanish Mackerel, Mandarin fish) Low fat fish	\leq \leq	4.00 2.50
Histamine mg/100g Chub Mackerel, Tuna Other fish	\leq \leq	100 30
Lead (Pb), mg/kg	\leq	0.5
Inorganic arsenic, mg/kg	\leq	0.1
Methyl mercury, mg/kg Predatory fish (shark, sailfish, tuna, pike and other) Non-predatory fish	\leq \leq	1.0 0.5
Cadmium (Cd), mg/kg	\leq	0.1
Polychlorinated biphenyl ^a , mg/kg PCB138, mg/kg PCB153 mg/kg	\leq \leq \leq	2.0 0.5 0.5
N-dimethyl nitrosamine, ug/kg	\leq	4
^a Only for sea fish, and calculated as the sum of PCB28, PCB52, PCB101, PCB118, PCB138, PCB153 and PCB180.		

4 Food additives

4.1 The quality of food additives should conform to relevant standards and regulations.

4.2 The variety and quantity of food additives should conform to relevant varieties and regulations.

5 Hygienic requirements for the process of production and processing

The hygienic requirements of production process should conform to GB 14881.

6 Packaging

The packing container and materials should conform to relevant hygienic standard and regulations.

7 Marking

7.1 Marking shall conform to relevant regulation.

8 Storage and transport

8.1 Storage

The products should be stored in a dry and ventilated place. Never keep it together with poisonous, harmful or smelling articles.

8.2 Transport

Transport vehicle should be clean and protected against sunshine and rain. Never transport it together with poisonous, harmful or smelling articles.

9 Inspection methodology

9.1 Sensory examination

Take adequate amount of specimen and check it under natural light.

9.2 Physical and chemical inspection

9.2.1 Acid number and peroxide value: test with small amount of fat according to GB/T 5009.56, and measure it according to GB/T 5009.37.

- 9.2.2 Histamine: According to GB/T5009.45.
- 9.2.3 Inorganic arsenic: According to GB/T5009.11.
- 9.2.4 Lead: According to GB/T5009.12.
- 9.2.5 Cadmium: According to GB/T5009.15.
- 9.2.6 Methyl mercury: According to GB/T5009.17.
- 9.2.7 Polychlorinated biphenyl: According to GB/T5009.190.
- 9.2.8 N-dimethyl nitrosamine: According to GB/T5009.26.